EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Applicants' attorney, Mr. Jeffrey Weaver, on 04/10/2008.

Please amend claims 1, 12, 15, 25, 28 and 30 as follow:

1. (Currently Amended) An apparatus for controlling data flow through a network, the apparatus

comprising:

one or more processors;

memory coupled to at least one of the one or more processors; and

a plurality of time-based queues logically configured on the memory and together

defining a period of time with each time-based queue defining a separate increment of time

within the period of time, whereby each time-based queue is set to dequeue all of its contents at a

separate time, every time that a specified increment of time elapses,

wherein the processsor is configured or designed to (a) determine whether there are time-

based queues that are scheduled to be dequeued at a time after the expiration of a network traffic

shaping delay, (b) dequeue packets from those time-based queues scheduled to be dequeued, and

(c) direct (i) data or (ii) grants to transmit data to particular time-based queues based upon

network traffic shaping delays prescribed for the data or grants to transmit the data,

wherein each time-based queue is configured to dequeue more than one packet.

12. (Currently Amended) An apparatus for controlling data flow through a network, the

apparatus comprising:

traffic shaping means for determining how long to buffer data or grants to transmit data;

and

buffering means for buffering the data or grants to transmit data in a plurality of time-

based queues together defining a period of time, with each time-based queue defining a separate

increment of time within the period of time, whereby each time-based queue is set to dequeue all

of its contents at a separate time, every time that a specified increment of time elapses,

wherein the apparatus is configured or designed to (a) determine whether there are time-

based queues that are scheduled to be dequeued at a time after the expiration of a network traffic

shaping delay, and (b) dequeue packets from those time-based queues scheduled to be dequeued,

wherein each time-based queue is configured to dequeue more than one packet.

15. (Currently Amended) A method of controlling data flow through a network, the method

comprising:

determining that transmitting additional data to or from a network node will breach a

policy for the network node;

selecting one of a plurality of time-based queues that together define a period of time, with each time-based queue defining a separate increment of time within the time period, whereby each time-based queue is set to dequeue all of its contents at a separate time associated with its increment of time, every time that a specified increment of time elapses, wherein selecting the time-based queue comprises determining whether the selected time-based queue is scheduled to be dequeued at a time after expiration of a network traffic shaping delay;

dequeuing packets from the selected one of the plurality of queues scheduled to be dequeued; and

buffering the additional data or a grant to transmit the additional data in the selected one of the plurality of time-based queues,

wherein at least some times when dequeuing of all its contents, a time-based queue dequeues more than one packet.

25. (Currently Amended) A computer program product comprising a machine-readable storage medium on which are stored program instructions for controlling data flow through a network, the program instructions comprising:

determining that transmitting additional data to or from a network node will breach a policy for the network node;

selecting one of a plurality of time-based queues that together define a period of time, with each time-based queue defining a separate increment of time within the time period, whereby each time-based queue is set to dequeue all of its contents at a separate time associated with its increment of time, every time that a specified increment of time elapses, wherein

selecting the time-based queue comprises determining whether the selected time-based queue is
scheduled to be dequeued at a time after expiration of a network traffic shaping delay;

dequeuing packets from the selected one of the plurality of queues scheduled to be
dequeued; and

buffering the additional data or a grant to transmit the additional data in the selected one
of the plurality of time-based queues,

wherein at least some times when dequeuing of all its contents, a time-based queue
dequeues more than one packet.

28. (Currently Amended) A computer program product comprising a machine readable storage
medium on which is provided program instructions for controlling data flow through a network,
the program instructions comprising:

program code for determining that transmitting additional data to or from a network node
will breach a policy for the network node;

program code for selecting one of a plurality of time-based queues that together define a
period of time, with each time-based queue defining a separate increment of time within the time
period, whereby each time-based queue is set to dequeue all of its contents at a separate time
associated with its increment of time, every time that a specified increment of time elapses,
wherein selecting the time-based queue comprises determining whether the selected time-based
queue is scheduled to be dequeued at a time after expiration of a network traffic shaping delay;

program code for dequeuing packets from the selected one of the plurality of queues
scheduled to be dequeued; and

program code for buffering the additional data or a grant to transmit the additional data in the selected one of the plurality of time-based queues,

wherein at least some times when de-queuing of all its contents, a time-based queue dequeues more than one packet.

30. (Currently Amended) An apparatus for controlling data flow through a network, the apparatus comprising:

means for determining that transmitting additional data to or from a network node will breach a policy for the network node;

means for selecting one of a plurality of time-based queues that together define a period of time, with each time-based queue defining a separate increment of time within the time period, whereby each time-based queue is set to dequeue all of its contents at a separate time associated with its increment of time, every time that a specified increment of time elapses; and

means for buffering the additional data or a grant to transmit the additional data in the selected one of the plurality of time-based queues,

wherein the apparatus is configured or designed to (a) determine whether there are time-based queues that are scheduled to be dequeued at a time after the expiration of a network traffic shaping delay, and (b) dequeue packets from those time-based queues scheduled to be dequeued,

wherein each time-based queue is configured to dequeue more than one packet.

REASONS FOR ALLOWANCE

2.   The following is an examiner's statement of reasons for allowance:

        As per claims 1, 12, 15, 25, 28 and 30, the prior art fails to teach or disclose the step of

determining whether there are time-based queues that are scheduled to be dequeued at a time

after the expiration or time-out of a network traffic shaping delay and dequeue packets from

those time-based queues [specification, pages 9-12; and Figures 2-4].

        Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

                                            Conclusion

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DUSTIN NGUYEN whose telephone number is (571)272-3971.

The examiner can normally be reached on flex schedule.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Flynn Nathan can be reached on (571) 272-1915. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

     Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dustin Nguyen/
Primary Examiner, Art Unit 2154